



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/618,456

07/11/2003

John C. Opie

32303.00003

3860

23619

7590

11/12/2008

SQUIRE SANDERS & DEMPSEY LLP
TWO RENAISSANCE SQUARE, 40 NORTH CENTRAL AVENUE
SUITE 2700
PHOENIX, AZ 85004-4498

EXAMINER

ANDERSON, GREGORY A

ART UNIT

PAPER NUMBER

3773

MAIL DATE

DELIVERY MODE

11/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/618,456	Applicant(s) OPIE ET AL.	
	Examiner GREGORY A. ANDERSON	Art Unit 3773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 28-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 9-13, 17-23, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginn et al. 6,022,313 in view of Mindich 4,793,346.

Ginn et al. discloses a device comprising a cutting tool that includes: a cutting head having a leading edge 72 comprising an annular cutting blade 68; and a body section 62 having a proximal end, a distal end and an inner passage extending therethrough (Fig. 1). Ginn et al. further discloses the body section being tubular (Fig. 1) and an endovascular component 16 that includes one or more structures to which the tubular body member can be attached (Fig. 5).

However, Ginn et al. does not disclose an attachment section on the cutting head.

Mindich discloses an attachment section 4 of the cutting head. Mindich further discloses the endovascular component comprising a flexible tube 1 and a guide wire 13 (Col. 2 ll. 8-19). Mindich further discloses the cutting head being made of steel (Col. 2 ll. 28-30) and pivoting when attached to the body section (abstract ll. 10-15). Mindich further discloses a torque handle 5 comprising a cylindrical tube and attached to the proximal end of the body section and having a hand grip (Col. 2 l. 64-Col. 3 l. 3).

Art Unit: 3773

Mindich also discloses the endovascular component including an inner section 13 and an outer section 1a.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Ginn et al. with the attachment section of Mindich in order to facilitate the replacement or removal of the cutting blade.

Regarding claims 28 and 29: The methods of Claims 28 and 29 are inherent to the use of the device of Ginn et al. in view of Mindich.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ginn et al. in view of Mindich as applied to Claim 1 above and further in view of Hall 3,512,519.

Ginn et al. in view of Mindich discloses the invention essentially as claimed as discussed above.

However, Ginn et al. in view of Mindich does not disclose the cutting head including a funnel shaped inner cavity having a first inner diameter at the leading edge and a second inner diameter, the second inner diameter being smaller than the first inner diameter.

Hall discloses the cutting head including a funnel shaped inner cavity having a first inner diameter at the leading edge and a second inner diameter, the second inner diameter being smaller than the first inner diameter (Fig. 2).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Ginn et al. in view of Mindich with the cutting head of Hall in order to hold and support the tissue that has been removed as taught by Hall (Col. 1 ll. 64-69).

Art Unit: 3773

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ginn et al. in view of Mindich as applied to claim 1 above and further in view of Eaves, III 6,143,008.

Ginn et al. in view of Mindich discloses the invention essentially as claimed as discussed above.

However, Ginn et al. in view of Mindich does not disclose the attachment section being threaded.

Eaves, III discloses the attachment section being threaded (Col. 5 ll. 18-23).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Ginn et al. in view of Mindich with the threaded section of Eaves, III in order to facilitate the convenient removal of the attachment section.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ginn et al. in view of Mindich as applied to claim 1 above and further in view of Lambert 4,666,437.

Ginn et al. in view of Mindich discloses the invention essentially as claimed as discussed above.

However, Ginn et al. in view of Mindich does not disclose the body section being coated with a hydrophilic coating.

Lambert discloses a hydrophilic coating.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Ginn et al. in view of Mindich with the hydrophilic

Art Unit: 3773

coating of Lambert in order to give good hand grip in dry conditions while simultaneously becoming very slippery when in contact with body liquids as taught by Lambert (Col. 1 ll. 14-26).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ginn et al. in view of Mindich as applied to claim 1 above and further in view of Taheri 5,634,935.

Ginn et al. in view of Mindich discloses the invention essentially as claimed as discussed above.

However, Ginn et al. in view of Mindich does not disclose the body section having a low-friction coating.

Taheri discloses coating the instrument with a low-friction coating (Col. 4 ll. 46-51).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Ginn et al. in view of Mindich with the low friction coating of Taheri in order to provide ease of movement of the instrument as taught by Taheri (Col. 4 ll. 46-51).

7. Claims 7, 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginn et al. in view of Mindich as applied to claim 1 above and further in view of Fogarty et al. 5,968,066.

Ginn et al. in view of Mindich discloses the invention essentially as claimed as discussed above.

However, Ginn et al. in view of Mindich does not disclose the body section comprising a helical thread on the body member.

Fogarty et al. discloses a helical thread 23. Fogarty et al. further discloses the device being formed of polycarbonate (Col. 8 ll. 27-30).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Ginn et al. in view of Mindich with the thread of Fogarty et al. in order to form a better seal with the skin as taught by Fogarty et al. (Col. 3 ll. 64-67).

8. Claims 15, 16, 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ginn et al. in view of Mindich as applied to claims 1, 20, and 28 above and further in view of Hogendijk 6,080,175.

Ginn et al. in view of Mindich discloses the invention essentially as claimed as discussed above.

However, Ginn et al. in view of Mindich does not disclose an automatic advancement device that comprises an ultrasonic vibrator or electric motor.

Hogendijk discloses an automatic advancement device that comprises an ultrasonic vibrator 450 or electric motor (Col. 9 ll. 43-44).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Ginn et al. in view of Mindich with the ultrasonic vibrator or electric motor of Hogendijk in order to facilitate axial motion of the movement of the cutting tool.

Art Unit: 3773

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall in view of Mindich.

Hall discloses a cutter head comprising a leading edge 11 comprising an annular cutting blade and an inner cavity 14 extending therethrough comprising a funnel-shaped section having a first diameter juxtaposed the leading edge and a second diameter smaller than the first diameter (Fig. 2).

However, Hall does not disclose an attachment section for attaching a body section.

Mindich discloses an attachment section 4.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Hall with the attachment section of Mindich in order to facilitate ease of removal of the cutting head.

10. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mindich in view of Fogarty et al..

Mindich discloses a tool comprising a cutting head 2 and a body section 1 connectable to the cutter head and having an exterior surface.

However, Mindich does not disclose a helical thread on the exterior surface.

Fogarty et al. discloses a helical thread 23.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Mindich with the thread of Fogarty et al. in order to form a better seal with the skin as taught by Fogarty et al. (Col. 3 ll. 64-67).

Response to Arguments

11. Applicant's arguments with respect to claims 1-24 and 28-33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY A. ANDERSON whose telephone number is (571)270-3083. The examiner can normally be reached on Mon-Thurs 9:30am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory A Anderson/

Application/Control Number: 10/618,456

Page 9

Art Unit: 3773

/(Jackie) Tan-Uyen T. Ho/

Supervisory Patent Examiner, Art Unit 3773